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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,957	06/10/2002	Kensaku Kagecchi	72012/57217	4893

EXAMINER	
DIEP, NHON THANH	

ART UNIT	PAPER NUMBER
2613	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/070,957	KAGECHI ET AL.	
	Examiner	Art Unit	
	Nhon T Diep	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1, 4/1, 7/4/1, 10-11 is/are rejected.

7)☒ Claim(s) See Continuation Sheet is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 01 June 2002 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/12/2002.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims objected to are 2, 3, 4/2/1, 4/3/1, 5/4/1, 5/4/2/1, 5/4/3/1, 6/4/1, 6/4/2/1, 6/4/3/1, 7/4/1, 7/4/2/1, 7/4/3/1, 8/7/4/1, 8/7/4/2/1, 8/7/4/3/1, 9/7/4/1, 9/7/4/2/1 and 9/7/4/3/1 .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kojima (US 5,410,351)

Kojima discloses a video signal transmission system and method comprising the same image encoding device having: means of image encoding which encodes images in accordance with an irreversible compression method capable of processing input images in small region units (fig. 5, el. 23), means of image decoding which decodes encoded data created with the means of encoding (fig. 5, el. 23-24), means of characteristic pixel extraction which utilizes input images and decoded images obtained by the means of image decoding to extract characteristic pixels (fig. 5, el. S23) , means of calculating characteristic distortion which utilizes characteristic pixels to calculate characteristic distortion of the decoded images in relation to the input images (fig. 6, el. 28, 30, 31, 34), and means of parameter value control which controls parameter values determining the extent of data compression in the means of image encoding in accordance with the characteristic distortion (fig. 6, el. S24, fig. 5, el. 8) as specified in claim 1; wherein the small regions are blocks, the means of extracting characteristic pixels is means of extracting characteristic blocks which utilizes the decoded and input

images in order to extract characteristic blocks, pixels being extracted within the characteristic blocks (macroblock: 16X16 picture elements col. 1, ln. 59-63) as specified in claim 4/1; wherein the means of extracting characteristic blocks is a means of classifying and extracting characteristic blocks which classifies and extracts characteristic blocks, extracting pixels within the characteristic blocks (col. 6, ln. 22-63) as specified in claim 7/4/1.

3. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipate by Yoshimi et al (JP 11055672 A), cited by the applicants.

Yoshimi et al discloses a dynamic image coder comprising the same image encoding device having: means of image encoding which encodes input images in accordance with an irreversible compression method (fig. 23, 104), means of image decoding which decodes encoded data created by the means of image encoding (fig. 23, 105), means of calculating characteristic distortion which calculates characteristic distortion by comparing the decoded image and the input image by small region units (fig. 24, 111), means of dividing regions which divides regions by small region units in accordance with the degree of characteristic distortion, creating region-divided images with region-divided information, ((Paragraph 0006: a small block is assigned to the large field of a motion and the big block is assigned to the small field of motions, such as back ground, para. 33), means of creating region images which utilizes input and region-divided images to create region images (parag. 0040), means of encoding region-divided images which encodes region-divided images in accordance with an irreversible compression method and creates region-divided image encoded data (fig. 23, el. 118,

parag. 0060), means of encoding first-region images which encodes in accordance with an irreversible compression method the image of a stipulated region divided by the means of dividing regions (parag. 0043, 0064), means of encoding second-region images which encodes images of other regions with the required picture quality (para. 0064), and means of combining encoded data which combines region-divided image encoded data and encoded data for each region into a single set of encoded data (para. 0085).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuyuki et al (JP 10243261 A) cited by the applicant, in view of Stenzel et al (US 5,737,032).

Katsuyuki et al discloses a video signal encoding device comprising the same image encoding device having: a pixel value converter which performs pixel value conversion 9fig. 2, el. 23-24) is used to reduce the dynamic range of pixel value areas where it is difficult to detect visual deterioration of the input image signal (parag. 0026), and means of image encoding which encodes images output from the pixel value converter (fig. 2, el. 25) as specified in claim 10. It is noted that Katsuyuki et al does not particularly disclose that a pixel value conversion table is used to converse pixel value.

Stenzel et al teaches the using of lookup tables for converting pixel value(col. 3, ln. 32 – col. 4, ln. 14). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Katsuyuki et al by using the conversion table is used to converse pixel value. Doing so would help to simplify the conversion process.

Allowable Subject Matter

6. Claims 2, 3, 4/2/1, 4/3/1, 5/4/1, 5/4/2/1, 5/4/3/1, 6/4/1, 6/4/2/1, 6/4/3/1, 7/4/1, 7/4/2/1, 7/4/3/1, 8/7/4/1, 8/7/4/2/1, 8/7/4/3/1, 9/7/4/1, 9/7/4/2/1 and 9/7/4/3/1 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Borer (US 6,442,202) discloses a motion vector field error estimation

b. Pau et al (US 6,320,907) discloses an adaptive tree-search vector quantization in MPEG2 decoder.

c. Fandrianto et al (US 6,441,841) discloses a video compression/decompression processing and processors.

d. Apostolopoulos et al (US 6,404,814) discloses a transcoding method and transcoder for transcoding a predictively-coded object-based picture signal.

e. Chiu et al (US 6,366,705) discloses a perceptual preprocessing techniques to reduce complexity of video coders.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T Diep whose telephone number is 703-305-4648. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on 703 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ND
29 Sept 2004

NHON DIEP
PRIMARY EXAMINER